

CLAIMS

What is claimed is:

1. A method of data storage employing a tape cartridge having a cartridge memory, the method comprising:

2. storing a cartridge stamp in the cartridge memory; and,
3. determining if the cartridge stamp has been updated.

1. 2. The method of claim 1, and wherein determining if the cartridge stamp has been updated comprises:

3. performing a first reading of the cartridge stamp;
4. performing a second reading of the cartridge stamp; and,
5. looking for a difference in the cartridge stamp between the first reading and the
6. second reading.

1. 3. The method of claim 1, and further comprising:

2. providing a set of label data stored in the cartridge memory;
3. updating the set of label data stored in the cartridge memory; and,
4. updating the cartridge stamp in response to updating the set of label data.

1. 4. The method of claim 1, and further comprising:

2. determining that the cartridge stamp has been updated; and,
3. reading the set of label data in response to determining that the cartridge stamp
4. has
5. been updated.

1. 5. The method of claim 1, and wherein the cartridge stamp comprises a real-time stamp.

1. 6. The method of claim 1, and wherein the cartridge stamp comprises a randomly selected character.

1. 7. The method of claim 1, and wherein the cartridge stamp comprises a sequentially selected character.

1. 8. A method of data storage employing a tape cartridge which has a length of tape
2. with a set of general data stored thereon, and which has a cartridge memory, the
3. method comprising:

1 storing a cartridge stamp in the cartridge memory;
2 updating the set of general data; and,
3 updating the cartridge stamp as a result of updating the set of general data.

1 9. The method of claim 8, and further comprising:
2 storing a set of label data in the cartridge memory; and,
3 updating the set of label data as a result of updating the set of general data.

1 10. A method of data storage employing a tape cartridge which has a cartridge
2 memory with a set of label data stored therein, and which has a length of tape with a set
3 of general data stored thereon, the method comprising:
4 storing a cartridge stamp in the cartridge memory;
5 replacing the set of label data stored in the cartridge memory with an updated set
6 of label data; and,
7 replacing the cartridge stamp stored in the cartridge memory with an updated
8 cartridge stamp in response to replacing the set of label data.

1 11. The method of claim 10, and further comprising:
2 providing a reader memory; and,
3 storing the cartridge stamp in the reader memory.

1 12. The method of claim 11, and further comprising:
2 reading the updated cartridge stamp from the cartridge memory;
3 comparing the updated cartridge stamp to the cartridge stamp stored in the
4 reader memory; and,
5 determining that the updated cartridge stamp stored in the cartridge memory
6 does not match the cartridge stamp stored in the reader memory.

1 13. The method of claim 12, and further comprising reading the set of label data from
2 the cartridge memory in response to determining that the updated cartridge stamp
3 stored in the cartridge memory does not match the cartridge stamp stored in the reader
4 memory.

1 14. The method of claim 13, and further comprising replacing the cartridge stamp in
2 the reader memory with the updated cartridge stamp from the cartridge memory in
3 response to determining that the updated cartridge stamp stored in the cartridge
4 memory does not match the cartridge stamp stored in the reader memory.

1 15. The method of claim 14, and further comprising:
2 storing the set of label data in the reader memory; and,
3 replacing the set of label data in the reader memory with the updated set of label
4 data in the reader memory in response to determining that the updated cartridge stamp
5 stored in the cartridge memory does not match the cartridge stamp stored in the reader
6 memory.

1 16. The method of claim 15, and further comprising replacing the set of general data
2 with an updated set of general data, wherein replacing the set of label data stored in the
3 cartridge memory with an updated set of label data is in response to replacing the set
4 of general data with an updated set of general data.

1 17. A data storage apparatus, comprising a tape cartridge having a cartridge memory
2 which is configured to store therein a cartridge stamp.

1 18. The apparatus of claim 17, and further comprising a first controller, wherein:
2 the cartridge memory is further configured to store therein a set of label data;
3 and,
4 the first controller is configured to execute a sequence of computer-executable
5 steps to:
6 update the set of label data; and,
7 update the cartridge stamp in response to updating the set of label data.

1 19. The apparatus of claim 18, and further comprising a second controller configured
2 to execute a sequence of computer-executable steps to:
3 read the cartridge stamp from the cartridge memory during a first reading thereof
4 before the cartridge stamp is updated;
5 read the updated cartridge stamp from the cartridge memory during a second
6 reading thereof after the cartridge stamp is updated;
7 compare the cartridge stamp to the updated cartridge stamp; and,
8 determine that the cartridge stamp does not match the updated cartridge stamp.

1 20. The apparatus of claim 19, and wherein the second controller is configured to
2 execute an additional computer-executable step to read the updated set of label data
3 from the cartridge memory in response to determining that the cartridge stamp does not
4 match the updated cartridge stamp.

1 21. The apparatus of claim 20, and further comprising a reader memory, and wherein
2 the second controller is configured to execute additional computer-executable steps to:
3 store the set of label data in the reader memory; and,
4 update the set of label data stored in the reader memory in response to
5 determining that the cartridge stamp does not match the updated cartridge stamp

441150-32216860